Amendments to the Specification:

Please rewrite paragraph [0006] as follows:

[0006] On the other hand, in the piezoelectric/ electrostrictive film type device, ~~from~~ due to the demands for high integration and displacement, the thickness of one piezoelectric/electrostrictive layer has tended to be reduced to 20 μm or less. However, ~~at a~~during manufacturing~~-time~~, organic compounds such as ~~a binder~~binders are contained in ~~a~~ the ceramic material. Therefore, micro-pores having a diameter of 0.5 to 5 μm are formed in the sintered piezoelectric/ electrostrictive layer, and some of the holes are opened in an outer surface of the piezoelectric/ electrostrictive layer (See JP-A-5-124188). The micro-pores opened in the outer surface are sometimes formed through the upper electrode formed in the piezoelectric/electrostrictive layer upper part.

Please rewrite paragraph [0008] as follows:

[0008] Furthermore, in the piezoelectric/electrostrictive film type device 30 in which the end of the piezoelectric/ electrostrictive layer 73 projects onto the substrate 44 as shown in FIG. 20, the moisture infiltrates into a gap 70 (0.2 to 10 μm) between the projecting portion 79 of the piezoelectric/electrostrictive layer 73 and the substrate 44, ~~and this~~which causes ~~peels of~~ the piezoelectric/electrostrictive layer 73 to peel.

Please rewrite section heading on page 10, line 2 as follows:

DETAILED DESCRIPTION OF ~~PREFERRED EMBODIMENTS~~THE INVENTION

Please rewrite paragraph [0016] as follows:

Accordingly, there can be provided a piezoelectric/electrostrictive film type device in which any moisture does not infiltrate into the micro-pores 81 opened in the outer surface of the piezoelectric/ electrostrictive layer 73 or the upper electrode 75 and there is not any dielectric breakdown or short-circuit of the piezoelectric/electrostrictive layer 73. In the piezoelectric/electrostrictive film type

device, the piezoelectric/electrostrictive layer 73 including the projecting portion 79 which does not contact the upper and lower surfaces of the respective electrodes 75, 77 (75 to 77) is disposed. Even in this case, ~~there can be provided~~ the piezoelectric/electrostrictive film type device 10 can be provided in which the moisture does not infiltrate into the gap 70 between the piezoelectric/electrostrictive layer 73 and substrate 44 and which is superior in durability without causing any peel of the piezoelectric/electrostrictive layer 73. In addition, ~~for~~ in the piezoelectric/electrostrictive film type device 10 of the present invention, only the surface of the piezoelectric/electrostrictive layer 73 is modified. Therefore, ~~there is~~ hardly any restriction is placed onto the piezoelectric/electrostrictive layer, and the above-described effect can be fulfilled without deteriorating the properties of the piezoelectric/electrostrictive layer 73, such as the flexural displacement. ~~Constituting~~ The constituting elements will concretely be described hereinafter.

Please rewrite paragraph [0022] as follows:

[0022] The substrate 44 in the present invention may be formed of ~~the~~ a ceramic, but is preferably constituted of a material ~~which does not change in~~having properties ~~at a time of a heating~~that do not change during the heat treatment of the piezoelectric/electrostrictive layer 73 or the electrodes 75, 77 stacked on the thin portion 66 and which ~~is~~ has superior ~~in~~ heat resistance and chemical stability. The substrate 44 is preferably formed of an electric insulation material so that a wiring connected to the lower electrode 77 formed on the substrate 44 is electrically disconnected.

Please rewrite paragraph [0023] as follows:

[0023] Concretely, suitable examples of the substrate material include at least one material selected from a group consisting of (stabilized) zirconium oxide, aluminum oxide, magnesium oxide, titanium oxide, cerium oxide, spinel, mullite, aluminum nitride, silicon nitride, and glass. Above all, ~~the~~ a material containing stabilized

zirconium oxide is preferable in that the mechanical strength is high, tenacity is superior, and the durability of the thin portion 66 including a thin structure and loaded with vibration can therefore be improved, and that chemical stability is high and reactivity with the piezoelectric/electrostrictive layer 73 or the electrodes 75, 77 is remarkably small.

Please rewrite paragraph [0028] as follows:

[0028] Next, as shown in FIGS. 1 to 6~~,~~ and 11 to 15, the electrodes 75, 77 (75 to 77) ~~in~~ of the present invention are electrically connected to the piezoelectric/electrostrictive layer 73 (71, 72). As a typical example, as shown in FIGS. 1 to 3, a pair of flat film shaped electrodes 75, 77 may be stacked on the upper and lower surfaces of the piezoelectric/electrostrictive layer 73.

Please rewrite paragraph [0032] as follows:

[0032] Moreover, in the present invention, the piezoelectric/electrostrictive film type device shown in FIGS. 11 to 14 has an advantage in that power consumption can be reduced. The piezoelectric/electrostrictive film type device shown in FIG. 15 includes a structure in which an inverse piezoelectric effect of the field direction that is large ~~in~~ with respect to strain and generation force can effectively be used, and is advantageous in causing a large displacement.

Please rewrite paragraph [0034] as follows:

[0034] Moreover, the electrodes 75, 77 (75 to 77) are preferably formed of materials which are solid at room temperature and which can withstand a high-temperature oxidation atmosphere at a time of sintering and integrating the electrodes and the substrate and/or the piezoelectric/electrostrictive layer and which is superior in electric conductivity. Concrete examples of ~~the~~ suitable materials for the electrodes include aluminum, titanium, chromium, iron, cobalt, nickel, copper, zinc, niobium, molybdenum, ruthenium, palladium, rhodium, silver, tin, tantalum, tungsten, iridium,

platinum, gold, lead, and ~~another~~ other simple ~~metal or an alloy~~metals or alloys containing one of the metals mentioned above. A cermet material may also be used in which the materials constituting the piezoelectric/electrostrictive layer, or the material constituting the substrate 44 such as zirconium oxide, cerium oxide, and titanium oxide are dispersed in the metals described above.

Please rewrite paragraph [0035] as follows:

[0035] Moreover, the materials of the electrodes 75, 77 (75 to 77) in the present invention are preferably selected in consideration of ~~a~~ the method of forming the piezoelectric/ electrostrictive layer 73 (71, 72). For example, for the piezoelectric/electrostrictive film type device 10 shown in FIGS. 1 to 3, ~~at a time of the heating~~during heat treatment of the piezoelectric/electrostrictive layer 73, ~~in~~ for the lower electrode 77 already formed on the substrate 44, it is preferable to use a simple metal of a platinum group which does not change even at a heating treatment temperature of the piezoelectric/electrostrictive layer 73, an alloy of the simple metal of the platinum group and gold and/or silver, an alloy of the platinum group metals, an alloy of two or more different types of metals of the platinum group, or high-melting metals such as an alloy of the metals of the platinum group and gold and/or silver. Also in the piezoelectric/electrostrictive film type device 20 including the multilayered structure shown in FIGS. 4 to 6, it is preferable to use ~~the~~ high-melting metals in the electrode 77 that is positioned in a lowermost layer and an intermediate electrode 76 that is disposed between the piezoelectric/electrostrictive layers 71, 72, which are already formed at the time of the ~~heating~~ heat treatment of the piezoelectric/electrostrictive layers 71, 72.

Please rewrite paragraph [0037] as follows:

[0036] On the other hand, in the piezoelectric/ electrostrictive film type device 10 shown in FIGS. 1 to 3, after the ~~heating~~ heat treatment of the piezoelectric/ electrostrictive layer 73, the upper electrode 75 can be formed on the

piezoelectric/electrostrictive layer 73 at a low temperature (the electrode 75 positioned in an uppermost layer in the multilayered piezoelectric/electrostrictive film type device 20 shown in FIGS. 4 to 6). Therefore, in addition to the high-melting metals, low-melting metals such as aluminum, gold, and silver may also be used.

Please rewrite paragraph [0043] as follows:

[0043] Moreover, examples of the surface modifier for use in this case include: ~~the~~ a fluorine-based polymer compound that is dissolved in hydrofluoroether; ~~the~~ a fluorine-based polymer compound that is dissolved in hydrofluoroether and further mixed with dispersed polytetrafluoroethylene (PTFE); a silicone solution containing metaxylene hexafluoride as the major component; and an acetic ether solution of 3, 3, 3-trifluoropropyl trimethoxysilane and ~~the~~ a fluorine-based polymer compound. Of these, ~~the~~ a fluorine-based polymer compound that is dissolved in hydrofluoroether is preferable in that the water repellency is good. ~~The~~ A fluorine-based polymer compound dissolved in hydrofluoroether and further mixed with dispersed polytetrafluoroethylene (PTFE) is more preferable in that the water repellency is good.

Please rewrite paragraph [0054] as follows:

[0054] Concrete examples of the material for the piezoelectric/electrostrictive layer include ~~the~~ a ceramic containing one or two or more of lead zirconate, lead titanate, lead zirconate titanate, lead magnesium niobate, lead nickel niobate, lead zinc niobate, lead manganese niobate, lead antimony stannate, lead manganese tungstate, lead cobalt niobate, barium titanate, sodium bismuth titanate, potassium sodium niobate, and strontium bismuth tantalite. ~~Especially, a~~A material containing lead zirconate titanate (PZT-system) and lead magnesium niobate (PMN-system) as the major components, or sodium bismuth titanate as the major component is especially preferable, in that a stabilized composition having a high electromechanical coupling coefficient and piezoelectric constant and little reactivity with the ceramic substrate at the sintering time of the piezoelectric/electrostrictive film is obtained.

Please rewrite paragraph [0055] as follows:

[0055] Furthermore, a material ~~may also be used~~ including the ceramic material containing a small amount of components to which at least one alone or two or more oxides of ~~lantern~~lanthanum, calcium, strontium, molybdenum, tungsten, barium, niobium, zinc, nickel, manganese, cerium, cadmium, chromium, cobalt, antimony, iron, yttrium, tantalum, lithium, bismuth, and tin are added may also be used. For example, when ~~lantern~~ lanthanum or strontium is contained in lead zirconate, lead titanate, and lead magnesium niobate as the major components, advantages can sometimes be obtained that anti-electric field or piezoelectric property can be adjusted.

Please rewrite paragraph [0062] as follows:

[0062] Moreover, examples of the method of applying the piezoelectric/electrostrictive material include: various thick-film forming methods such as ~~a~~ screen printing ~~method~~, dipping ~~method~~, ~~coat method~~coating, and electrophoretic migration ~~method~~; and various thin-film forming methods such as an ion beam method, sputtering ~~method~~, vacuum deposition ~~method~~, ion plating ~~method~~, chemical vapor deposition ~~method~~ (CVD), and plating. Above all, since the piezoelectric/electrostrictive layer 73 having satisfactory piezoelectric/electrostrictive properties is obtained, ~~the~~ thick-film forming methods such as ~~the~~ screen printing ~~method~~, dipping ~~method~~, ~~coat method~~coating, and electrophoretic migration ~~method~~ are preferable.